

What is claimed is:

1. An opening and closing device comprising:
 - a stator having a stator cam; and
 - a rotor having a rotor cam urged to the stator cam by a spring, and rotatable with respect to the stator;
 - wherein the stator cam has a first inclined plane on the side wall; and
 - the rotor cam has a second inclined plane on the side wall; and
- 10 the first inclined plane and the second inclined plane are capable of moving in contact with each other.
2. The opening and closing device of claim 1, wherein the stator cam comprises a flat portion and a projecting portion both of which are formed on a side of the stator, wherein
 - the projecting portion has a projecting top portion, a first tilting portion and a second tilting portion, the first tilting portion and the second tilting portion extend from the projecting top portion,
 - at least one of the first tilting portion without involving the projecting top portion and the flat portion has the first inclined plane,
 - and the flat portion is connected to the second tilting portion.
- 20 3. The opening and closing device of claim 1, wherein the rotor cam comprises a flat portion and a projecting portion both of which are formed on a side of the rotor, wherein
 - the projecting portion has a projecting top portion, a third tilting portion and a fourth tilting portion, the third tilting portion and the fourth tilting portion extend from the projecting top portion,

at least one of the third tilting portion without involving the projecting top portion and the flat portion has the first inclined plane, and the flat portion is connected to the fourth tilting portion.

5 4. The opening and closing device of claim 1, wherein the first inclined plane includes a plurality of inclined planes of different angles of inclination and the second inclined plane includes a plurality of inclined planes of different angles of inclination.

10 5. The opening and closing device of claim 1 for use in electronic equipment, the electronic equipment comprising:

 a fix housing having at least one of an operating part and a sound input part formed on a top face thereof; and

15 a movable housing having at least one of a display and a sound output part formed on a surface thereof;

 wherein the stator is attached to the fix housing; and

 the rotor is attached to the movable housing.

20 6. The opening and closing device of claim 1 for use in electronic equipment, the electronic equipment comprising:

 a fix housing having at least one of an operating part and a sound input part formed on a top face thereof; and

 a movable housing having at least one of a display and a sound output part formed on a surface thereof;

25 wherein the stator is attached to the movable housing; and
 the rotor is attached to the fix housing.

7. Electronic equipment having an opening and closing device,

the electronic equipment comprising:

a fix housing having at least one of an operating part and a sound input part formed on a top face thereof;

5 a movable housing having at least one of a display and a sound output part formed on a surface thereof; and

the opening and closing device comprising:

a stator having a stator cam;

 a rotor having a rotor cam urged to the stator cam by a spring, and rotatable with respect to the stator;

10 wherein the stator cam has a first inclined plane on the side wall;

 the rotor cam has a second inclined plane on the side wall; and

15 the first inclined plane and the second inclined plane are capable of moving in contact with each other.

8. The electronic equipment of claim 7, wherein the stator is attached to the fix housing, and the rotor is attached to the movable housing.

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9. The electronic equipment of claim 7, wherein the first inclined plane and the second inclined plane contact with each other when the fix housing and the movable housing are closed.

25 10. The electronic equipment of claim 7, wherein the first inclined plane and the second inclined plane contact with each other when the fix housing and the movable housing are opened at a predetermined angle.